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INTERACTIVE REWARD SYSTEM AND METHOD

Field of Invention

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The present invention is directed to a computerized interactive offer and reward processing system, and more particularly, to a coupon issuance and redemption system for use in interactive mediums such as the Internet.

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Copyright Notice

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Background of the Invention

In recent years, there has been enormous growth in Internet and online shopping and other online consumer

30 transactions. Additionally, many "regular" businesses have created websites to promote their products and

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services. Businesses, especially e-commerce businesses, have the need to attract customers to their websites. One common way to attract Internet customers to a website is to advertise on other websites.

5   In the Internet environment, a typical advertisement on a website is what is known as a banner advertisement. A banner advertisement can be an advertisement that appears towards the top or bottom of a webpage on a website. Microsoft Press, Computer Dictionary, 3rd Edition,

10 defines a banner to be a section of a webpage containing an advertisement that is usually an inch or so tall and spans the width of the webpage. The banner contains a link to the advertiser's website. Thus, a banner advertisement has an webpage associated with it, which is

15 usually the webpage at the website of the advertiser. When a user selects the banner advertisement, for example, by clicking on the banner advertisement, the user is taken to the webpage associated with the advertisement. That is, when a user clicks on the banner

20 advertisement, the webpage specified in the banner advertisement is downloaded to the user's computer for viewing by the user's Internet browser program.

25 In this document, the term "interact with" will be used as a generic description of the process of selecting or clicking on an advertisement or other interactive image in order to be taken to a webpage (or other output display) or to have displayed further information

30 regarding or associated with the advertisement.

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There are other types of advertisements that can be utilized on the Internet. Presently, banner advertisements are one of the most common forms of

5 Internet advertising.

The value of Internet advertising to a business can be seen in the following two examples. Juno Online is a "free" email service and is said to be the second largest

10 Internet Service Provider (ISP) in the United States. It is financially supported through electronic advertising. See U.S. Patent No. 5,809,242 to D. E. Shaw et. al. See also U.S. Patent Nos. 5,838,790 and 5,848,397. Geocities is a popular service that hosts websites for "free". It

15 is financially supported by advertisers. Each user who creates a "free" website that is hosted by Geocities agrees to allow Geocities to include banner advertisements on the user's website.

20 However, with the growth of Internet advertisements, and because banner and other Internet advertisements are becoming quite common, Internet users have become more discerning as to which advertisements they react to. Accordingly, the "click-through" rate for many Internet

25 advertisements is decreasing. (The click-through rate is the number of users who select the advertisement by clicking on it divided by the total number of users to whom the advertisement is displayed.)

30 As a result, there is a need for an incentive scheme to

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reward users who interact with banner and other Internet advertisements.

Various promotional programs have been implemented to
5 attract consumers to websites. For example, cybergold.com has a scheme that allows users to establish a cybergold account. Points will accrue in the account when the user performs various functions, such as visiting a website, interacting with an advertisement or
10 purchasing a product. These points can be redeemed to purchase products. Netcentives.com is a promotional program that allows users to earn points for completing activities on websites. Users can earn points for doing things like purchasing products, downloading software and
15 completing surveys. These types of schemes have had limited success due to their complexity, the need to pre-register and establish an account and the difficulty of redeeming points for products.

20 Electronic coupon systems have been proposed as a marketing tool. One example is the marketing network and process described in a patent by Golden et. al., U.S. Patent No. 5,761,648. However, that system has a number of deficiencies. The coupons are not associated with
25 advertisements, and so do not in themselves attract users to interact with an advertisement on an Internet site. All coupons are stored on a service database for selection. Thus, each coupon competes with other coupons in the system for the attention of the user. The coupon
30 must be downloaded to the consumer's computer. This

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means the coupon could be lost if the consumer's hard disk crashes. To redeem the coupon, it must be printed out or electronically transmitted to the merchant. In the Golden et. al. system, it is difficult (if not

5　impossible) for the consumer to redeem the coupon if shopping electronically from a computer other than the computer to which the coupon was downloaded.

Another example is U.S. Patent No. 5,855,007 to Jovicic

·10　et. al. This patent describes an electronic coupon communication system for generating and redeeming product discount coupons over the Internet. Again, the coupon must be stored on or printed at the user's computer.

15　Accordingly, there is a need for an incentive program that:

1.　encourages users to interact with electronic advertisements that are associated with the present

20　　invention;

2.　takes minimal time and skill to use;

3.　does not require pre-registration;

25　4.　aligns with real-world experiences;

5.　is easy to implement;

6.　provides easy-to-redeem offers;

30

7.　allows tracking of sales and consumer preferences; and

8.　will likely attract significant traffic to

35　　participant's website or "place of business".

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There is a similar need for an interactive reward system
outside of the Internet environment. For example, there
are many different kinds of interactive media, such as,

5 for example, cable TV, digital TV, web TV, interactive
kiosks, automated teller machines, in-flight ,
entertainment units, mobile telephones and gaming
devices. It is common for advertisements and interactive
images to be output in such interactive media.

10 Accordingly, there is also a need for an incentive
program that encourages users to interact with such
promotions.

Summary of the Invention

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The present invention is directed to a computer-
implemented reward-based advertising system and method.
For convenience of description only, the present
invention will be described in the context of

20 advertisements, pages and interactive images displayed on
websites. However, as will become apparent below, the
present invention is not so limited to this
representative embodiment, and has many uses outside of
Internet webpage advertisements. As discussed in detail

25 below, the present invention is not limited to
advertising on websites, and can be used with many
interactive media technologies, for example, digital TV,
interactive kiosks, automatic teller machines and in-
flight entertainment units.

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In the representative embodiment, the present invention can be used to attract users to participant's websites. Users can collect rewards simply by interacting with an advertisement or image, e.g., clicking on a banner

5 advertisement on a website.

An advertisement, such as a banner advertisement, that is part of the system of the present invention can be marked in a certain way, for example, with a distinctive

10 "reward" logo, border or icon. When the user sees an advertisement with rewards marking, it will indicate to the user that a reward will be available to the user in exchange for interacting with this advertisement. Accordingly, this marking will attract the user to this

15 advertisement as compared to other advertisements without the rewards marking. The marking makes it easy for users to determine which advertisements are worthwhile to click on.

20 The system can also operate successfully in cases where participating advertisements do not have the reward marking. For example, some advertisements could grant to the user a "surprise" reward if the user interacts with the advertisement. However, in this case, the user would

25 not be likely to be attracted, in the first instance, to the advertisement because of the system of the present invention. It may, however, encourage repeated selection of a web page or interactive image.

30 According to the present invention, rewards can be easily

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redeemed and transferred.

In the representative embodiment, the available offers
and rewards are maintained in a central database. This
5   makes administration and control of the system simpler
and more efficient. Additionally, it prevents users from
misplacing the rewards to which they are entitled. In
the representative embodiment, the central database is
maintained by a system administrator.
10

For ease of explanation, the advertiser (i.e., the person
paying for the banner advertisement) will be assumed to
be the same person who creates the offer and assumes
liability for redemption of the reward. To avoid
15   confusion, this person will be called the promoter. As
will be appreciated, there will be many promoters
utilizing a single embodiment of the present invention
and taking advantage of the central database.

20   From a consumer's point of view, the system is extremely
simple. Assume that the user is connected to the
Internet via an ISP or online service such as Compuserve
or AOL and is "surfing" the World Wide Web or other
online service. The user is visiting a number of
25   websites (or other form of content location). Each
website may have one or more banner advertisements. When
the user sees a page, banner advertisement or interactive
image with a rewards marking, it will indicate to the
user that a reward will be available for interacting with
30   this advertisement and will encourage the user to do so.

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The user may then select this advertisement, for example, by clicking on the advertisement. If the user does so, the user then will instantly and automatically "receive" a reward. The reward is stored in the central database

5 and need not be physically or electronically transferred to the user. At the end of the reward allocation process, the webpage associated with the advertisement (e.g., the webpage of the promoter) is usually (but not necessarily) displayed to the user.

10

There are many kinds of rewards that can be accommodated by the present invention. Examples of rewards offered by a promoter may include:

15 • save 5% when purchasing goods at the promoter's website;

• get a free X when you purchase Y at the promoter's website;

• pay no shipping when you purchase goods at the
20 promoter's website; and

• get two for the price of one at the promoter's webstore.

A reward may also be a physical coupon that can be printed for use/redemption at the promoter's real-world
25 shop or premises.

A reward may include one or more conditions, for example, an expiry date, and whether the reward is "single use" or can be used more than once.

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At any time, a user can visit a central website to see a list of all rewards that they have collected. Typically, that website will be maintained by the system administrator and will be electronically linked to the
5 central database. At the central website, the user can list their current rewards, redeem a reward, or transfer a reward to another user.

The user can redeem their rewards at the promoter's
10 website or otherwise by communicating, interacting or transacting with the promoter. An application program operated by the promoter will query the central database to determine if the user is entitled to a reward and to authenticate the reward. On authentication of the
15 reward, the promoter will fulfill the terms of the reward.

The user can also print the reward using an output device such as a printer and redeem the benefit at a physical
20 location or outlet. The printed reward or coupon may be authenticated with the central database using an IVR, telephone or web interface.

In short, there are three typical means to allow a user
25 to redeem a reward. First, the user can redeem a reward by visiting the central website and claim a reward there. Second, the user can redeem a reward at a website determined by the promoter. For example, as part of an online transaction process, the promoter can have a
30 "claim Reward" button or link which will, if selected by

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the user, automatically reduce the total price paid by the user or revise the transaction to reflect the redemption of the reward. If there is more than one applicable reward available, the promoter will prompt the

5 user as to which one the user wishes to redeem. As can be seen, in this second redemption scenario, the promoter will interact with the central database to obtain information about available rewards for that user. Thirdly, the user can print a record of the reward and

10 redeem it at a physical outlet specified by the promoter.

In the representative embodiment of the present invention, Internet technology is used to minimize inconvenience or paperwork for the user. Each user of

15 the system is allocated a unique user number by the system administrator. This user number is stored on the user's computer, for example, in a "cookie" maintained by the user's Internet browser. (Examples of Internet browsers include Netscape Navigator and Microsoft's

20 Internet Explorer. A cookie is a block of data that a web server stores on a client system. A copy of the cookie can be sent to a website server when the user visits the website.) The user need not know that the user number is being stored on the user's computer --

25 this can be done seamlessly by the browser program. However, the user number can be made available to the user so that if the user's computer crashes or if the user uses another computer, the user can still have access to his or her rewards.

30

The user's rewards are stored in the central database indexed under the user number of the user.

There is no need for rewards to be electronically or
5 otherwise transmitted or sent to the user. The only information that need be provided to the user is the user number, and although desirable to do so, providing the user number to the user is an optional feature.

10 The promoter can easily create, delete and modify offers. An offer sets out the appropriate rules or parameters that, if fulfilled by the user, will become a reward available for redemption or transfer by that user. Offers are stored in the central database. An offer is
15 associated with one or more advertisements. The rules for an offer can specify start dates and end dates for the creation of the reward from the offer, the type of user the offer is open to, the redemption rules, etc.

20 An advertisement may have more than one offer associated with it. For example, U.S. residents could receive one reward and users living out of the U.S. may receive a different reward for interacting with the same advertisement.
25

Accordingly, one can see that the present invention has a number of benefits.

Consumers will be attracted to promoter's websites via
30 their participating advertisements. To create an extra

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degree of excitement for the user, the promoter's
advertisement need not specify the nature of the reward,
but merely that a reward will be available. The user
will be motivated to interact with the advertisement to

5 find out what reward the user actually received. There
is no registration process, so the system is available to
all Internet users. There is no cost or wasted time in
collecting rewards -- rewards are collected seamlessly by
the user in interacting with advertisements in the normal

10 way. All rewards can be stored in the one place for easy
viewing, sorting and redemption by the user. It is
simple for the user to redeem a reward. The user can
transfer rewards to others.

15 For promoters, advertisement click-through rates will
increase, creating additional business opportunities.
Offers easily can be created, but they can have
sophisticated rules. Accordingly, the cost to use the
system is low and the financial and promotional benefits

20 can be high.

Further, the system administrator may collect valuable
information relating to response and redemption rates,
user demographics and profiles. In an advanced

25 embodiment, rewards can be targeted to specific types of
users based, for example, on past collection and usage of
rewards and demographics.

Although described herein in relation to banner

30 advertisements on the World Wide Web, the present

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invention has broader application. For example, it is not limited to banner advertisements, but can be used in conjunction with other types of interactive advertisements, web pages, interactive images and even

5 simple hypertext links. As described in the detailed description below, the present invention can be used in conjunction with many different interactive media, such as, for example, cable TV, digital TV, web TV, interactive kiosks, automated teller machines, in-flight

10 entertainment units, mobile telephones and gaming devices.

In the place of a cookie, a physical token (e.g., magnetic stripe card or smartcard) or user ID number may

15 be utilized to track a user's rewards accumulation within the database.

Thus, the present invention provides a number of benefits. For example, the present invention:

20
1.   encourages users to interact with promoter's advertisements instead of the advertisements of others;

2.   takes minimal time and skill to use;

25 3.   does not require pre-registration;

4.   aligns with real-world experiences, such as collecting coupons;

5.   is easy to implement;

6.   is flexible in operation;

30 7.   provides easy-to-redeem rewards;

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1   allows tracking of sales and consumer preferences; and

9.   will likely attract significant traffic to the promoter's website, store or other advertising or

5   sales medium.

Brief Description of the Drawings

Fig. 1 is a block diagram illustrating the typical
.10 hardware components of the user's computer used in conjunction with the representative embodiment of the present invention.

Fig. 2 is a block diagram illustrating the typical
15 network environment of the representative embodiment.

Fig. 3 is a high level flow chart representing the process of obtaining a reward according to the present invention.

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Fig. 4 is a high level flowchart representing one way of redeeming a reward according to the present invention.

Fig. 5 is a high level flowchart representing an
25 alternative way of redeeming a reward according to the present invention.

Fig. 6 depicts the database structure of the central database of the present invention.

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Fig. 7 is a high level flowchart representing redeeming a physical coupon or reward.

Detailed Description

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Referring now to the drawings, and initially Fig. 1, there is illustrated in block diagram form the representative hardware elements of a user's computer 2. In the representative embodiment, the computer 2 is used

10 by a typical user to access the Internet and view webpages or other content. The computer 2, such as a multimedia personal computer (MPC), comprises a processor 4, such as an Intel Pentium processor, RAM 6 and a hard disk drive and hard disk 8. Although the processor 4 can

15 be any computer processing device, the representative embodiment of the present invention will be described herein assuming that the processor 4 is an Intel 486 processor or higher. The hard disk 8 stores an operating system, such as the Microsoft Windows 98 or Windows NT

20 operating system, which is executed by processor 4. The present invention is not limited to the Windows operating system, and with suitable adaptation, can be used with other operating systems. For ease of explanation, the representative embodiment as described herein assumes the

25 Windows 98 operating system.

Application program computer code is stored on a disk that can be read by drive 8 and executed by processor 4. In the representative embodiment, the user's computer 2

30 will have a web browser program (such as, for example,

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Internet Explorer or Netscape Navigator). Ideally, the browser program should be able to accept, store and send cookies.

5 The computer 2 is coupled to the Internet 20. Typically, the computer 2 will be coupled to the Internet 20 via a modem 10.

Coupled to the computer 2 are one or more input devices
10 12, such as a keyboard, mouse, joystick, trackball, microphone, scanner, and the like. Also coupled to the PC are one or more output devices 14, such as a monitor, sound speakers, printer, and the like.

15 Turning now to Fig. 2, there is illustrated a typical network environment applicable to the representative embodiment. As discussed above, the user's computer 2 is coupled to the Internet 20. Also coupled to the Internet is a computer 50 operated by a system administrator of
20 the scheme. The system administrator has a website 52 controlled by the computer 50, typically a webserver computer. The computer 50 also runs an application program 54 (implementing, in part, functions of the present invention)and a central database 56 (discussed in
25 detail below). The central database 56 and computer 50 are maintained by the system administrator. The central database, as discussed in detail below, stores the available offers and rewards.

30 The central database 56 can be implemented using a

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database program that can be accessed, directly or indirectly, via the Internet 20. For example, the Microsoft SQL Server or Oracle database programs can be used to implement the central database 56.

5

The application program 54 runs the reward application which applies logic to the parameters in the Offer Table (see Fig. 7) within the central database 56 as well as checking for unique values (if applicable). The reward

10 application also validates and, if applicable, expires redeemed rewards.

A user, using the user computer 2, will access content, such as websites, via the Internet 20. Assume that the

15 user is viewing a website 32. This website 32 can be made available to Internet users via a webserver computer 30 as is well known in the art. The website 32 may include an advertisement 34. The advertisement 34 advertises the goods or services of the promoter.

20 According to the representative embodiment, the advertisement 34 can include a rewards indicator 36, such as a distinctive rewards logo, border or icon. The rewards indicator 36 signifies that the advertisement 34 is participating in the instant rewards program of the

25 present invention.

In the representative embodiment, the promoter also has a website 42, controlled by a computer 40 that is coupled to the Internet 20. This website 42 also can be made

30 available to Internet users via the webserver computer 40

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as is well known in the art.

Fig. 3 is a highlevel flowchart representing the process
of obtaining a reward according to the present invention.
5 The user (using the user computer 2) visits a website,
e.g., website 32 (step 60). The user selects the
advertisement 34 on the website 32 (step 61). (If the
user does not select an advertisement, the process
according to the present invention does not take place.)
10 If the user selects the advertisement 34, the central
application 54 tries to identify the user. It does this
by determining if a reward cookie (that includes a unique
number ID) (step 62). If there is no cookie, the user is
asked if the user will participate (step 63). If the
15 user does not wish to participate, content associated
with the promoter is displayed on the user computer 2,
e.g., the website 42 of the promoter (step 67a). If the
user does wish to participate, then the central
application 54 attempts to set a reward cookie (step 65).
20 If the cookie cannot be set, the user is requested to
enter an ID number (step 64). If an invalid ID is
entered, the user is returned to step 63.

Once the user has been identified by the central
25 application 54, the central application determines if the
selected offer is valid (step 66). If the offer is not
valid, content provided by the promoter can be provided
to the user (step 67a).

30 If the offer is valid, the central database 56 is updated

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to show that the user has been allocated a reward (step 68).

Thus, the user receives a reward associated with the

5 advertisement 34, as specified by the promoter (step 68), and optionally, a message is displayed to the user informing the user that he or she has received a reward (step 69). The reward is stored in the central database 56, indexed under a user number (ID) associated with the

10 user (step 68). Content associated with the promoter is displayed on the user computer 2, e.g., the website 42 of the promoter (step 67b).

In further detail, when the user interacts with the

15 advertisement 34, the user will be temporarily redirected to the central application 54 to allow for the identification of the user, issuance of the reward and security confirmation. Steps 62 through 68 are explained in more detail as follows:

20

When the user selects the advertisement 34 (step 61), control of the process is passed to the central application 54. The central application 54 processes the interaction in the following steps:

25

1. *Identify the user.* Each user has a unique number ID). This ID can be maintained automatically by the user computer 2 (e.g., as a cookie) or manually entered by the user each time a reward is received (step 64). The user

30 has the responsibility to maintain their own ID. Total

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rewards received will be maintained in the central
database 56, which will

- check if the user has a valid ID; and if not,
- present the manual entry form for entry of the ID

5   plus registration options for first time users.

2.   *Associate the Reward to the ID.*   Checking will be
done to ensure the reward has not already been
received/redeemed (step 66).   If everything is correct,
10 the reward is added to the list of rewards currently
maintained by the central database 56 under the ID of the
user (step 68).

3.   *Redirect the User* to the target address as specified
15 by the Promoter and stored in the central database 56
(step 67b).   In this example, the target address is the
promoter's website 42.   The central database 56 redirects
the user computer 2 to the target address.

20 For a first time user of the system, the user is issued
with the ID, which (in the representative embodiment) is
a unique string comprising randomly generated
alphanumeric characters, 6 to 8 characters in length.
The ID can be stored by the user's browser program as a
25 cookie (this is the default setting) or manually by the
user (for example, in memory or on paper).   If the ID is
stored as a cookie, then all rewards are collected
automatically without user intervention.   If the ID is
not stored as a cookie, the user is required to manually
30 input the ID when rewards are received or redeemed by the

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user.

There are three typical means to allow a user to redeem a
reward. First, the user can redeem a reward by visiting

5 a central website 52 and redeem a reward there. This is
illustrated in Fig. 4. The user visits the central
website 52 operated by the central database 56 (step 70).
If the user ID is stored as a cookie, then the cookie is
accepted (step 71) and this ID is seamlessly made

10 available to the central application 54. If a cookie is
not accepted, then the user is prompted to manually enter
the ID (step 74). The central application determines if
the ID provided is valid. Assuming that the ID is valid,
the central application 54 will retrieve from the

15 database 56 (step 76) and display a list of rewards
available for that user (step 77). The user will select
a reward for redemption (step 78) and will be taken to
the promoter's website, e.g., website 42 (step 79). A
program or script running at the promoter's website will

20 then redeem the reward according to its conditions. For
example, the user will complete the purchase (step 80),
and optionally, the reward will be expired in the central
database 56.

25 Secondly, the user can redeem a reward at the promoter's
website (e.g., 42), as set out in Fig. 5. For example,
the user is shopping on the promoter's website (step 60).
A shopping script is running on the promoter's website 42
(step 100). For example, the user selects a product to

30 purchase. The user is asked whether or not the user

wishes to a claim a reward, for example, by selecting a "claim Reward" button or link on the promoter's website 42 (step 102). If the user does not claim a reward for this purchase, the purchasing process continues as it

5 would prior to implementation of this invention (step 104). If no cookie is located, the user is asked to enter a valid ID (step 105). If the user enters an invalid ID, purchasing process will continue as normal without a reward (step 104). The shopping script will

10 call the central application 54 to query the central database 56 to obtain a list of rewards (step 76). The central application 54 will retrieve from the database 56 (step 76) and display a list of rewards available for that user (step 77). The user will select a reward for

15 redemption (step 78) and the total purchase price is recalculated to take into account redemption of the reward (step 108). A program or script running at the promoter's website will then redeem the reward according to its conditions. For example, the user will complete

20 the purchase (step 80), and optionally, the reward will be expired in the central database 56 (step 81).

Thirdly, as an alternative to redeeming a reward online, the user can print a reward coupon. This is illustrated

25 in flowchart form in Fig. 7. Fig. 7 is similar to Fig. 5 in a number of respects, so the same reference numerals are used for similar steps and are not explained again here. After selecting the reward (step 78), the user prints a reward coupon which includes a reward number or

30 other identifier (step 120) and presents the coupon at a

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physical location or outlet as specified by the promoter
(step 122). The printed reward or coupon may be
authenticated and expired at the outlet by submitting the
reward ID into the central database using an IVR,

5 telephone or web interface (step 124).

Fig. 6 illustrates, in table format, the structure of the
central database 56. In the representative embodiment,
the central database 56 is a relational database

.10 comprising a number of tables. There are other tables
for audit, administrative and archive purposes.

Promoters can interact with the system via a web page or
a software tool.

15

The promoter can register and create offers via a form on
the central website 52 at any time and it is the
responsibility of the promoter to maintain the
information relevant to the promoter in the central

20 database 56.

The form will ask the Promoter to specify the following:

1.   Target location;

2.   Valid referrer locations (can be multiple) to ensure

25   that the user interaction is not being spoofed;

3.   Redemption location. When a User wants to redeem a
       reward, the central application 54 will redirect the
       user to this location.

4.   Offer expiry date. When this date is reached, the

30   central application 54 will purge all invalid

rewards.

Promoters can update, delete and list their offers.

5 After this information is submitted, the promoter will
receive an ID enabling them to alter this information at
a later date. They will also receive two identifiers:
one being the target, the other being the target for the
redemption of the reward.

·10

The system administrator can perform management functions
on the central database 56.

The following is a functional description of common
15 functions that are carried out according to a
representative embodiment of the present invention. The
functions are classed in three groups, namely, user
functions (Unn), Promoter functions (Pnn) and Management
functions (Mnn).

20

Fn #	User Functions
U01	Receive reward 1st time with cookie
U02	Receive reward 1st time with NO cookie
U03	Reject reward 1st time with cookie
U05	Receive reward
U06	List rewards
U07	Redeem reward – physical voucher
U08	Redeem reward – Internet purchase
U09	Email reward
U10	Receives emailed reward
U11	User changes PC
U12	User enters some personal information

	Promoter Functions
P01	Register
P02	Logons on
P03	Create Offer
P04	List Offers
P05	Update Offer
P06	Delete Offers
P07	Validate reward
P08	Expire reward
	Management Functions
M01	Logon
M02	Runs a report
M03	Suspend Promoter
M04	Delete an Offer
M05	Create an Offer
M06	Set parameters

U01 User receive reward – 1st time with cookie

Pre-Condition

User is connected to Internet

5 User accepts cookies

Use Case

1. User is surfing the web
2. User clicks on interactive image – banner/advert/text
3. User sees 'welcome to Rewards' web page

10 4. User clicks '<u>continue</u>'
5. User taken to target web page

Post Condition

User's receives cookie ID

[Optional: User writes down ID]

15 Central database updated

U02 User receive reward – 1st time with NO cookie

Pre-Condition

User is connected to Internet

User does **not** accept cookie

20 **Use Case**

1. User is surfing the web
2. User clicks on interactive image – banner/advert/text
3. User sees 'welcome to Rewards' web page
4. User clicks on '<u>no cookies please</u>'

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5. User taken to target web page
Post Condition
User writes down ID
Central database updated

5 <u>U03 User rejects reward - 1st time with cookie</u>

Pre-Condition
User is connected to Internet
User accepts cookies
Use Case
10 1. User is surfing the web
2. User clicks on interactive image - banner/advert/text
3. User sees 'welcome to Rewards' web page
4. User clicks '<u>never again</u>'
5. User taken to target web page
15 **Post Condition**
User's receives cookie ID
User will never again see a Rewards welcome page

<u>U05 User receive reward</u>

20 **Pre-Condition**
User is connected to Internet
Use Case
1. User is surfing the web
2. User clicks on interactive image - banner/advert/text
25 3. If cookie not accepted - user sees interstitial
'confirmation' web page, user enters ID and clicks
<u>continue</u>
4. If cookie accepted user sees interstitial
'confirmation' web page (flashes up for 1 sec)
30 5. User taken to target web page
Post Condition
Rewards database updated

<u>U06 User list rewards</u>

Pre-Condition
35 User has received reward [u01]
Use Case
1. User visits Rewards website
2. If cookie not accepted, user enters ID
3. User reads message 'you have x <u>rewards</u>'
40 4. User clicks link
5. User sees list of rewards
6. [User can click on reward and be taken to promoter's

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website 42]
Post Condition

U07 User redeem reward - physical voucher

Pre-Condition

5 User has received reward [u01]

Use Case

1. User goes to promoter's website 42
2. User clicks 'give me voucher'
3. If cookie not accepted, user enters ID

10 4. Promoter validates reward
5. User sees voucher
6. User prints voucher

Post Condition

User's cookie is updated

15 User uses voucher in real world shopping experience.
Outlet authenticates and expires reward using IVR,
telephone or web interface (optional).

U08 User redeem reward - Internet purchase

Pre-Condition

20 User has received reward [u01]

Use Case

1. User goes to promoter's website 42
2. User goes through shopping experience
3. If cookie not accepted, user enters ID

25 4. Promoter validates reward
5. User makes purchase and receives reward

Post Condition

User's cookie is updated
Reward updated on central database

30 User receives benefit

U09 User emails reward

Pre-Condition

User has received reward [u01]

Use Case

35 1. User visits Rewards website
2. User clicks 'email reward'
3. User selects reward from list
4. User enters email address of recipient
5. Users enters message [optional]

40 6. User clicks 'send'

Post Condition
User's cookie is updated
Reward updated on central database
Recipient receives email
5 Recipient processes reward [u06]

U10 User receives emailed reward
Pre-Condition
User has received email
Use Case
10 1. User reads email
2. User clicks on link inside email
3. User sees 'welcome' screen
4. User clicks 'continue'
5. User taken to promoter web page 42
15 **Post Condition**
User's cookie is updated
Central database updated

U11 User changes PC - rebuild rewards
Pre-Condition
20 User is connected to Internet
User is using different PC or has deleted his cookie
Use Case
1. User is surfing the web
2. User clicks on interactive image - banner/advert/text
25 3. User sees 'welcome to Rewards' page
4. User enters ID
5. User sees 'confirmation' web page (flashes up for 1 sec)
6. User taken to target web page
30 **Post Condition**
User gets all rewards relisted

U12 User enters some personal information
Pre-Condition
User has received some rewards
35 Admin has set parameters for personal information
Use Case
1. User is surfing the web
2. User clicks on interactive image - banner/advert/text
3. User sees 'reward information' page
40 4. User enters a piece of information:
  • Name
  • Email

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- Address
- Age bracket

5. User sees 'confirmation' web page (flashes up for 1 sec)

5 6. User taken to target web page

Post Condition
User gets 2 rewards – the promoter's and a system reward
Central database is updated

10 **Promoter use cases**

P01 Register with Rewards

Pre-Condition
Promoter has an offer to promote
Promoter visits Rewards website

15

Use Case
1. Promoter clicks 'register'
2. Promoter enters details:
   - Name
20   - Address
   - Company
   - Type of business
   - Email
   - Phone
25 3. Promoter clicks 'OK'

Post Condition
Promoter is registered
Promoter receives id & password

30 P02 Promoter Logon
Pre-Condition
Promoter is registered [p01]
Use Case
1. Promoter clicks 'Promoters'
35 2. Promoter enters ID
3. Promoter enters password
4. Promoter hits 'enter'
5. Promoter screen is displayed

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31

Post Condition

P03 Promoter List Offers
Pre-Condition
Promoter is logged on [p02]
5 **Use Case**
1. Promoter reads offers
Post Condition

P04 Promoter Create Offer
Pre-Condition
10 Promoter is logged on [p02]
Use Case
1. Promoter clicks 'New'
2. Promoter enters offer details:
   • Promoter
15   • Target URL
   • Description of offer
   • Start date
   • End date
   • Can offer be copied   [Y | **N**]
20   • Can offer be transferred   [Y | **N**]
   • Can user clip multiple offer   [Y | **N**]
3. Promoter clicks 'OK'
Post Condition
Promoter receives html tag to use
25 Central database is updated

P05 Promoter Update Offer
Pre-Condition
Promoter is logged on [p02]
Promoter has created offer [p04]
30 **Use Case**
1. Promoter selects offer
2. Promoter changes details:
   • Target URL
   • Description of offer
35   • Start date
   • End date
3. Promoter clicks 'OK'
Post Condition
Promoter receives html tag to use
40 Central database is updated

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P06 Promoter Delete Offer

Pre-Condition
Promoter is logged on [p02]
Promoter has created offer [p04]
5 **Use Case**
1. Promoter selects offer
2. Promoter clicks 'delete'
3. Promoter confirms with 'OK'
Post Condition
10 Central database is updated

P07 Promoter Validates Reward

Pre-Condition
Promoter has created offer [p04]
User is redeeming a reward
15 Shopping script is running on promoter's web server
Use Case
1. Promoter shopping script calls central database 56
2. Database validates reward
3. Reply sent to script
20 **Post Condition**
Central database is updated

P08 Promoter Expire Reward

Pre-Condition
Promoter has validated reward [p07]
25 Promoter has given user the reward
Shopping script is running on promoter's web server
Use Case
4. Promoter shopping script calls central database 56 with
   expire reward details
30 5. Database expires reward
6. Acknowledgment sent to shopping script
Post Condition
Central database is updated

Management use cases

35 ## M01 Admin Logon

Pre-Condition
Admin has ID and password
Admin visits Rewards website
Use Case
40 1. Admin goes to hidden URL
2. Admin enters ID

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3. Admin enters password
4. Admin hits 'enter'
5. Admin screen is displayed
Post Condition
5 Admin is logged on

M02 Admin runs a report
Pre-Condition
Admin is logged on [m01]
Use Case
10 1. Admin clicks 'reports'
2. Admin enters report criteria:
3. Admin clicks 'OK'

Post Condition
15 Admin gets report on screen

M03 Admin Suspend Promoter
Pre-Condition

Admin is logged on [m01]
Use Case
20 1. Admin enters promoter ID
2. Admin clicks 'Suspend'
3. Admin clicks 'OK'

Post Condition
25 Promoter is suspended
No confirmation screens are displayed for this promoter

M04 Admin Delete an Offer
Pre-Condition

Admin is logged on [m01]
30 **Use Case**
1. Admin enters promoter ID
2. Admin selects offer from list
3. Admin clicks 'delete'
4. Admin clicks 'OK'
35
Post Condition
Offer is deleted
No confirmation screens are displayed for this offer

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<u>M05 Admin Creates Offer</u> ·

Pre-Condition

Admin is logged on [m01]
Use Case
5 1. Admin clicks 'Create Offer'
   2. Admin enters information
   3. Admin clicks 'OK'

Post Condition
10 Offer is created

<u>M06 Admin Sets Parameter</u>
Admin wants to offer incentives to get personal
information from users. (For example; after 5 rewards
have been selected, so that central database 56 can
15 obtain and store the name of the user).
Pre-Condition

Admin is logged on [m01]
Admin has created offer [m05]
Use Case
20 1. Admin clicks 'Parameters'
   2. Admin selects enters Offer number
   3. Admin enters trigger information
   4. Admin clicks 'OK'

25 **Post Condition**
   Offer is created

Summary of representative system from user's viewpoint:

1.   The User is viewing the web.

30 2.   The User activates an interactive image 34 that is

     associated with an offer.

3.   The User receives a reward which is stored in the

     central database 56.

4.   The User can use a web page at a central website 52

35   to list all their current rewards and their status

(currency and priority) or to send a reward to another User.

5. The User may redeem the reward by communicating with the promoter.

5

Summary of representative system from promoter's viewpoint:

1. The Promoter registers online with the system

2. The Promoter registers offers and their definition

10 in the central database 56.

3. The Promoter places an interactive image 42 on the web and a target address for the image/banner.

4. Users receive rewards by activating the image 42.

5. User redeem rewards by interacting or transacting

15 with the Promoter.

6. As part of the redemption, the reward application tracks and authenticates the reward for the promoter.

7. On authentication of the reward the Promoter

20 fulfills the offer.

The present invention has been described above in the context of browsing on the World Wide Web. However, the present invention is of general applicability and is not

25 limited to this application. For example, the following are applications that will benefit from the present invention. What is common to the cited examples is that they are all networks of devices with which users can interact and rely upon the use of unique user

30 identifiers. The software used to implement the present

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invention can be modified so as to perform these applications:

Automatic Teller Machine/Self-Service Kiosk/Point of Sale
5 *Terminals*

The present invention can be used in conjunction with an automatic teller machine (ATM), self-service computer controlled kiosk or POS terminal. Typically, a user will
10 insert a card (such as an ATM card, credit card, debit card or smart card) to commence a transaction. Advertising is displayed to a user on a screen (for example, a touchscreen) before, during or after a typical transaction. The advertisements can be enabled with the
15 rewards indicator 36 and related to an offer in the central database 56. When an advertisement 34 or image is selected by the user via touchscreen or trackball, a reward is associated to the card or account that is being used. Specific screens can be used to display the
20 rewards currently held. The card can then be used to redeem rewards to print coupons or at a point-of-sale device linked to the central rewards database.

Mobile (Cell) and Fixed Line Phones and Personal Data
25 *Assistants*

The quality of screen displays on mobile and fixed line telephones and PDAs is improving. Such displays can be used to display messages and other information such as
30 stock prices and bank account balances. A service that

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transmits information messages to a mobile phone could
also transmit and display to the user an advertisement
34. If the user sees advertisement that has an
associated rewards indicator 36, and responds, (for
5 example, by pressing the '#' button on the telephone
keypad) then their telephone ID number (such as a SIM
card number) will be recorded in the database 56 as being
eligible to claim the selected rewards. Accrued rewards
can be reviewed via an Interactive Voice Response (IVR)
10 or screen-based menu using the telephone. Redemption of
a reward could occur automatically using Caller Line ID
or entering the phone number when the user places their
order via their telephone.

15 It will be appreciated that more than one method can be
used to obtain and view rewards. For example, if the
user number of the web application discussed in the
detailed description above was associated with the user's
mobile telephone ID number, a user could obtain, view and
20 redeem rewards using both their web browser and mobile
telephone. A single "account" could store all rewards
for that user.

Stadium Seats

25

Advertising can be displayed during replays and close-ups
via in-seat monitors at newer or refurbished stadiums.
Some or all of these advertisements can include a rewards
indicator 36 related to an offer in the central database
30 56. When an advertisement or image is selected by the

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user, for example, via touchscreen or special response key, a reward is associated to the seat or member number (where seating has been allocated by subscription or season pass.) Specific screens can be used to display

5 the rewards currently held. Rewards might include member related services (e.g., future games) or in-seat services (merchandise or food offers).

Airline and other Travel Tickets

10

Advertisements can be displayed during in-flight narrowcast via in-seat monitors. Some or all of these advertisements can include a rewards indicator 36 related to an offer in the central database 56. The central

15 database 56 can be updated before departure and after landing. A local database (for example, located on the airplane) is used to temporarily store information if the airplane is out of contact with the central database 56. When an advertisement 34 or image is selected by the

20 user, for example, via touchscreen or special response key a reward is associated to the seat or card number (where a payment or loyalty card has been used). Specific screens can be used to display the rewards currently held as stored in the local database. Rewards

25 might include related services (eg. free in-flight telephone call, discounts at duty free store or car rental offers).

While the present invention has been particularly shown

30 and described with reference to representative

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embodiments, it will be understood by those skilled in the art that various changes in form and details may be made without departing from the spirit and scope of the invention.

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